

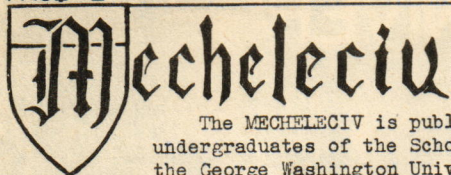
GEORGE WASHINGTON UNIVERSITY

Mecheleciw

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It's Your Move!

March 17, 1947

To The Editor
Mecheleciv,

The Hobby Shop seems a fine idea. While purchasing a copy of the Home Mechanics Hand Book for my own review the Manager of the Student Book Store told me that if the persons interested in the Hobby Shop would come in and see him he would be glad to contribute an electrically driven carpenter tool such as a saw, lathe or some other equipment.

Frederick M. Feiker, Dean
School of Engineering

Proposed less than two weeks ago, the hobby laboratory gained immediate favor. The engineering societies appointed members of a committee to investigate the possibilities and recommend methods of making it a reality.

The committee is enthusiastic about the prospects, and is going ahead with its planning. Perhaps the greatest problem is one of space. That problem is not insoluble, any more than the one of equipping such a shop.

The letter above shows the first response for equipment entirely unsolicited. It is a good start, and greatly appreciated.

The committee wants to know what type of facilities to plan for, how you think it should be financed, and what other suggestions you may have. Fill out the form on page 7, and drop it in the Mecheleciv box in front of the office of the Dean of the School of Engineering. Do it now, so you won't forget it.

It not only can be done, it is being done. Get in on the ground floor, and make sure this shop is what you want it to be.

The MECHELECIV wishes to thank the following alumni for their contributions:

Frank F. Mitchell, Jr.

Howard S. Cole

Charles E. Waldron

Warren G. Crump

Joseph A. Scoll, Jr.

Finances always present a problem, and the generosity of these loyal men is greatly appreciated.

DEAN'S COLUMN

INVENTORY - 21st CENTURY MODEL

One measure of our national ingenuity was well illustrated during the war by the records of the National Inventor's Council, an organization set up by the Secretary of Commerce in cooperation with the armed services for stimulating, receiving and evaluating ideas "to help win the war". Some 285,000 suggestions and inventions were received. As a people it was proved that we have a reservoir of ideas in the field of the natural sciences, engineering, and industry, which we tap successfully in both war and peace. We rightfully boast of what we call our yankee ingenuity.

Edwin H. Land, in the second Howard Lecture, posed a question. Can the ingenuity which we have shown in the research and development in the fields of the natural sciences be focussed on the problems of human relations? His challenge in effect was based first, on his belief that true basic research could find a better and less costly answer to any problem than merely expedient solutions and second, on his faith that if we approached the problems of human relations with the spirit of true research we could save what we now call our liberty.

It could be that March third was a red-letter date in history. It could be that if we will focus the ingenuity of America through the lenses of the anthropologist and the psychologist, upon the behavior of men and women in our industrial economy, we can invent social mechanisms to parallel the achievements of the day in the natural sciences.

It was a young man's address, a young man's challenge, and it is a young man's future.

--Dean Feiker--

"Modesty is really egotism. You keep your mouth shut so that people won't find out how dumb you are."

-- Milton K. Akers

OUR COVER

Photo by Folse

Such absorption in their work is certainly strong commendation for Bernard Bernstein and Ben Sorin, here seen in mechanical engineering laboratory. When it comes to calorimeters - or other fine points - these two know their way around. Bernstein (right, with the intent look) is a Theta Tau and a Sigma Tau, and Sorin (left, calm and collected) is a member of Sigma Tau.

CALENDAR

APRIL

2	SOCIETY MEETINGS
9	ENGINEERS COUNCIL
16	THETA TAU
23	SIGMA TAU - I.R.E.
30	THETA TAU

AIEE AWARD FOR STUDENT PAPER OFFERED

Twenty-five dollars and recognition by the Washington Section of A.I.E.E. is the opportunity offered to all full time undergraduates for student papers.

Sponsored by the Student Activities Committee of the local section, headed by Mr. D. C. Vaughn, the subject of the paper must be some phase of electrical engineering theory or practice. The three best papers chosen from George Washington University will be placed in competition with those from other engineering schools in the city.

Papers from G.W. must be submitted to Professor Milton K. Akers not later than May 16.

The rules for the contest are as follows:

1. The subject of the paper shall be some phase of electrical theory or practice.
2. The length should preferably be not more than 3000 words.
3. All full-time undergraduate students are eligible.
4. The Electrical Engineering faculty of G.W. will select the three best papers and submit them not later than June 1, 1947 to Mr. D. C. Vaughn, Potomac Electric Power Co, who is chairman of the Student Activities Committee of the Washington Section.
5. The best paper from this group will be selected by the Awards Committee, and the winner notified.
6. All Students wishing return of their papers should include their home address.

Mr. F. S. Black, chairman of the Washington Section, A.I.E.E. stated, "We hope that the students of the George Washington University will submit some interesting papers, and we know that the winner of the contest will have a justifiable pride in his achievement."

EE's, you shouldn't have any trouble -- you can accomplish two jobs with a single effort since the papers given at the May meeting can be submitted for this competition.

ALL ENGINEERS INVITED:

BUREAU OF STANDARDS STUDENT TRIP SET

THIS opportunity knocks but once in 3 or 4 years!!

The electrical division of the National Bureau of Standards will conduct open house for all student engineers on the night of May 14.

This will enable the student to obtain a first-hand picture of the standard and experimental work being done in the various sections. It provides an opportunity of meeting the students from Catholic and

Maryland Universities and the Bliss Electrical School.

The sections arranging a complete exhibition of their work include:

High Voltage Laboratory
Electrical Instruments
Capacitance and Inductance
Resistance
Magnetic
Battery

More detailed information will follow, but reserve that date now for THE field trip of the year.

ENGINEERS ARE PEOPLE

by John Le Reche

Dwin Craig Sees

Future In Pushbuttons



Both necessities and luxuries, controlled and delivered by pushbuttons, was one of the inspirations which made an engineering student of Dwin Craig.

Born in College City, Maryland, Dwin was graduated from Washington-Lee High School in 1937. At that time, he tried his talents in several fields: stock clerk, government messenger, soda jerk, and several jobs with local bands playing saxophone.

In 1940, Dwin found more desirable work when he obtained a job in one of the physics labs at the Bureau of Standards. He was an assistant in testing the optical quality of aerial cameras. There Dwin, impressed by the educated men around him, decided that he too would profit by further education.

Dwin, impressed by the educated men around him, decided that he too would profit by further education.

He had just registered in engineering when he was drafted in 1942. His service title was photo lab commander in the AAF. This required him to do aerial and radar photograph interpretations. He was one of the pioneers in the perfection of a system for accurately plotting bomb falls from photographs of a radar screen.

During 18 months in England, he managed to find time for some golf during time off. He was ready to go to the Pacific, but the war ended and Dwin was discharged as a 1st Lieutenant in November of 1945.

At that time, Dwin wasted no time getting started in school, enrolling as a full time student. He is now an assistant in the freshman physics laboratory. He plays the saxophone with the "Alaskans", a local dance orchestra.

Dwin Craig was recently initiated into Theta Tau, is a member of AIEE, and is on the Hobby Laboratory Committee. He has ambitious ideas, and would like to see the hobby shop grow into a place where people can give vents to their talents of design and handicraft.

Dwin was married before the war to the former Virginia McTaggart, whose acquaintance you should have made at the Engineer's Ball.

Dwin would like to get a master's degree in physics, and sees a great future in engineering, with "push-buttons".

AFTER THE ENGINEERS' BALL:

PERSONALITIES AND POST MORTES

There were snoopers at the Engineers' Ball-- and here are the results. The characters whose names appear in these items have managed to escape other unfavorable publicity. There is no intent to deprive the local dirt-diggers of their rightful province -- only to supplement their efforts.

Spontaneous applause followed the statement by Dean Feiker that he had always observed that engineers knew how to pick their lady friends.

It was a disappointment that more of the faculty were not present. The ones who attended seemed to enjoy themselves. Feiker, Cruickshanks, Harris and O'Halloran were there, and O'Halloran walked off with the door prize.

Radio enthusiast Bob Babin must have had a running start. He arrived early and was already in high gear.

The strain on Earl Stephenson must have been appreciable. With the stork expected at home, he was busily engaged taking tickets at the ball.

Our sailing expert, J. W. "Stag" Hanson, has been taking a verbal beating because of the high-pressure wolfing he was doing, and you know very well to whom. (She looked just like Margie.)

About midnight, Prof. Cruickshanks amazed both of the other sober spectators. Some rash, but eager student (who shall be nameless) walked up with his thermomework. With the dignified indulgence of a Supreme court justice, the professor donned the peepers, solved the difficulty.

Marjorie Rhodes, vamp of the Engineering School, managed to get plenty of pictures taken. She was escorted by Danny Martin, Kappa Sig. Margie says, "I had a wonderful time. Afterwards we went and had hamburgers and went straight home." Unquote.

It was satisfying to see that most of the married men brought their own wives. First appearance for many of them, here are a few that deserve mention:

Mrs. Clem Sunday created a stir with a bare-shoulders gown-- very fetching.

Mrs. L.R. Brown is a striking picture, especially agreeable in the black evening gown. It's easy to see Larry's good taste.

Mrs. Dwight Hastings seemed to be enjoying herself. Dwight himself doesn't remember what happened but it was a darned good dance.

Mrs. William Frahm, the belle of South Dakota, was there. She let Bill come along, too.

Mrs. Dwin Craig, wife of the sax player, observed that it "was a real treat to have a husband on Saturday night."

Two sad stories come to mind in connection with wives and husbands. one: Frank Soucek bought a ticket, made plans, etc., but at the last minute his wife had to go to New York. Two: Mrs. Don Blanchard couldn't find a baby-sitter, but she made Don come anyway. He sat around all evening making remarks about the above-mentioned Mrs. Sunday's lovely shoulders.

Mrs. Jim Haskell, her natural beauty augmented by a white orchid, was trying to teach her husband the samba. Jim, by the way, bought himself a loud red bow tie recently, and has been wearing it, believe it or not!

Enjoyment of the Ball wasn't the sole property of the married set, however. The MECHELECIV staff was much in evidence, among other hopeless classifications.

Jim LeCroy was greeting everyone with his friendly smile and a remark. He had reason for being elated, with the date he had. Say who was she? Norman Ziegler was there, just observing.

Manny Beck brought demure, heart-crusher Harriet Schwartz. He was so preoccupied most of the night he almost forgot to dance -- and the bottle only six inches away was barely wounded. Only "Enterprizes" Folse was able to intrude on the tranquility of this little scene, but then Folse managed to do that all over the place.

John Slothower was in evidence, flitting from place to place, mumbling about tickets and money.

Gerald Warner sported Barbara Grans, vivacious student of the Corcoran Art School. Quote, "We didn't drink, but were lulled to intoxication by the music."

Louise Odineal and Stan Russell, ME, made a very handsome couple. They later accompanied the Rhodes-Martin combine hamburger-hunting.

Lenny Bosin must be slipping. He came to the Engineers' Ball with a fifth, but when he left there was still three-quarters of it remaining. This time, instead of not being able to keep his mouth off the bottle, he couldn't keep his eyes off the girl.

X-Ray Measurement Error Reduced

By Emanuel Beck

Eastman Kodak research laboratories, Rochester, N.Y., have developed a new method for reducing the error in X-Ray absorption measurements. These errors are caused by scattered radiations in photographic X-Ray measurements.

To overcome the scattering of radiations, a lead chamber consisting of several parallel compartments is used. At the end of the chamber where X-Rays enter the compartment, holes are made over which filters are placed. At the opposite end provision is made for the recording film.

This new method will be used in calibrating X-Ray machines and analyzing X-Ray radiations.

ANSWER TO LAST MONTH'S PUZZLE

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	8	A		E		R		O	D
9		R		A		R		E	
	10	M		I		L		A	
11		O		L		I		G	O
	12	N		E		O		N	
13		T		O		N		E	
	14	C		I		S		L	
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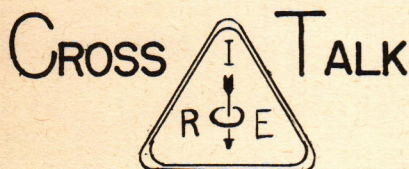
A.S. C.E.



Those members unfortunate enough to have missed this month's meeting were deprived of hearing the finest talk that the society has had in many a moon. Mr. R. E. Royall, of the Bureau of Public Roads, brought along an extensive collection of colored slides with which to augment his talk on the "Alaskan Highway". In addition to all this scenery, a very charming young lady handled the projector for him and fought off the CE wolves with the other. All in all, it was the best meeting of the year. And we had refreshments, too!

The April joint meeting, at which Dr. George A. Gamow, will speak on "Atomic Energy and the Engineer", should be a great meeting.

As a parting shot, all you CE's who have any sort of a hobby (that you can speak of in public, that is), be sure and do your part in organizing the contemplated Hobby Shop. Fremont Jewell is the CE representative to the committee and will appreciate your help and suggestions.



Gail Boggs, E.E. '48, gave a paper at the March 19th meeting which was entitled "General Problems in the Design of Superheterodyne Receivers."

Mr. Boggs has designed commercial receivers for Belmont Radio of Chicago and the Office of Strategic Services.

Some of the problems he outlined were: the choice of capacitances and inductances in tuned circuits, determination of proper intermediate frequencies, and the effect of increasing the Q of coils upon the operation of the receiver.

John Nygard sent in a membership blank to the I.R.E. and enclosed a check for dues payable to the A.I.E.E. A question was raised as to his good standing when the check bounced higher than a rubber one.

Marjorie Rhodes, Matthew Flato, Norris Hekimian, James Grant and Jack Sacks didn't tire of the haggling over the by-laws at the last meeting. They adjourned to the Hot Shoppe on Wisconsin Avenue and continued the discussion.



Herbert Murray, speaking on the "Development of the Diesel Electric Locomotive", won the student paper contest at the ASME March Meeting. Murray will represent George Washington University at the Regional Conference of the ASME, to be held at Villanova College in Philadelphia on April 17, 1947.

Elmer Sunday was runner-up with a talk on "Combustion Processes". In case Murray is unable to make the trip, Sunday will carry GW colors.

Nancy Larsen spoke on the "Trimetrigon System of Photography", which next to surveying is the best system of mapping now in use.

James LeCroy talked on "Steel in the Aircraft Industry", and Norman Ziegler's topic on "Supersonic Speed in Aircraft was a spellbinder.

The ASME has invited the other engineering societies to be guests at its April meeting. Here is the reason:

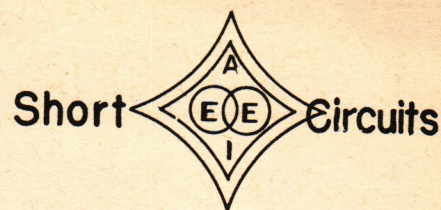
Dr. George Gamow will lecture on "Atomic Physics and the Engineer". No introduction is needed for Dr. Gamow, renowned nuclear physicist and author of the best seller, "Birth and Death of the Sun." A sound film, "Operation Crossroads", will be shown.

SIGMA TAU

Students who are in the upper third of the Junior or Senior class scholastically are being considered for membership to Sigma Tau, the national honorary Engineering Fraternity at G. W. U. The selections will be announced in the next issue of the Mecheleciv.

Election of officers of the fraternity took place March 29th. The results of the election will be announced in the next issue of the Mecheleciv.

Sigma Tau still plans to continue its coaching classes for those students in Engineering who feel the need for the service. Those interested will please send a letter to the Sigma Tau Fraternity, Xi Chapter, c/o The School of Engineering, stating the subject, and how he can be reached.



Short Circuits

The details of the AIEE Student Paper contest have been made public by Mr. Vaughn of the Washington Section of the AIEE. An article on page three of this issue gives full information. You can win, but only if you submit a paper. Get busy and bring that prize to G.W.!

The EE Lab Dance is being planned for the third week in April. J. Walter Hanson, of the dance committee, promises music with accent on both smooth and Latin rhythms.

At the April meeting, AIEE will join the ASME to hear Dr. George Gamow, who will speak on "Atomic Energy and the Engineer". A film, "Operation Crossroads," will be shown. This meeting should help to clear up many questions on the role of engineering in atomic power development.

May will bring, in addition to the traditional flowers, the Bureau of Standards Open House. The high voltage laboratories are opened only once in three or four years. Mark the date of May 14 on your calendar now.

At the last meeting, Mr. E.M. Kendall, of the AT and T, Co. spoke on coaxial Carrier Systems. He brought samples of coaxial cable and even an intermediate repeater to illustrate his fine lecture.

THETA TAU

On March 15th, the Gamma Beta Chapter held its annual spring initiation, banquet and dance at the Continental Hotel.

This event was particularly fine, due mainly to the stellar quality of the new initiates. They were: John Slothower, Elmer Sunday, Ervin Siljigren, John Dallas, Dwin Craig, Fremont Jewell, Julian Showkier, and Bill Gaines. (It looks as if we hit the jack-pot, doesn't it?)

The event also marked the twelfth birthday of the Chapter. The trimmings were a beautiful birthday cake generously presented by the Alumni Association, a generous sprinkling of alumni and six visitors from Pi Chapter from the good old University of Virginia. The thirteenth year should be a top-notch one for Gamma Beta.

ALUMNI NEWS AND NOTES

SEEN AT THE ENGINEERS' BALL:

Charlie Careau with wife "Stevie", whom he won when the Patent Office was in Richmond. Bob Weston and John Doane are holding the F.C.C. together. Lou Berkley is now with the York-Shipley Corp. in York, Pa. He is now in the purchasing dep't.

George Cunney announces the formation of a new company--the Eastern Sewage Disposal Co., Inc., of which he is the vice-president. Frank Mitchell is still one of the main cogs of Jansky and Bailey, radio engineering consultants. Arnold Kronstadt and pretty wife Ruth were very much in evidence. He is an expert in gage design at the Naval Gun Factory.

Warren Crump and wife Mary showed the younger generation how dancing should be done. Tommy O'Halloran, who is teaching an EE Lab. is still with the C&P Telephone Co. He won the door prize. The prize was presented to him by George Kilpatrick. George is with the Bureau of Yards and Docks, Navy Dep't. The Navy Dep't can also lay claim to ex-commander Bert Randall and Ben Genua. Bert left his cowboy boots home so that he could get in for half the admission. J. Harold Link also puts in time at the Navy Dep't.

NOT SEEN AT THE ENGINEERS' BALL:

Rudolph Gareau who is employed at the Naval Research Laboratory and George Gemender, a member of the Design Section of the Naval Gun Factory. Bill Randall was coming in from the Philippines as a member of the Coastal and Geodetic Survey. Jim Skiles is out in Idaho reclaiming for the Bureau of Reclamation. Whit Beatson is in Delaware working for the overseas branch of T.W.A.. William "Tilly" Ellenberger is Superintendent of Public Works at the Bureau of Standards. Raphael Cahn is an instructor of Mechanical Engineers at Illinois Tech. He hopes to get his masters degree there. Nick Toffolo is at the Naval Research Lab. Ira Jones is at present in New York on a mission for the A.T. and T., Co. He is now Division Assistant Manager.

The Mecheleciv wants to hear more from you alumni. How about dropping us a card!

Attention Alumni! The Alumni Office and the Mecheleciv Staff would like to know the address of the following engineering alumni so that they too can enjoy the Mecheleciv. If you know the present address of anyone on the list write it on a post card and send it to Lester Smith, Alumni Association, George Washington University, Washington 6, D.C.

	Class
Adams, Raymond Edmund	09 10
Affleck, Doyle Peter	30
Allison, Carl Oscar	28
Ball, Lawrence Deeble	32
Bazavoff, Sergie B.	22
Berkley, Louis Hugh	44
Birthright, Milton Parkins	34
Bortman, Isaac Maurice	13
Boyle, William Augustus	17 18
Bradford, Thomas Alden	
Brame, Arthur Hervey	13
Brennaman, Leonal Walter	39
Buchanan, Omar Bailey	13
Burchard, Edwin Day	13
Burton, Lawrence Elmer	19
Campbell, George W. B.	28
Craig, Harold Kennedy	11
Davidson, Wilbur Delozier	22
Davis, Thomas Allen	21 22
Deland, Louis Mason	42
Falco, Maceo	30
Ford, Florence Marian	17
Garman, George Guy	31
Garrett, Wilbur Ray	36
Golden, Gene Edward	35
Gwinn, Thomas R.	10
Haden, James T.	12
Harder, Robert G. W.	29
Harrison, Thomas Randolph	18
Hartnell, George Freeman	39
Hauser, Leon A.	18
Hayes, Roy Bagley	1899 1900
Hill, Hugh Stewart	07
Honn, Harlan Verne	09 10
Hughes, Henry Ellis	04
Janes, Milo F.	39
Jenkins, Oliver Lloyd	11
Johnson, Carl	36
King, Robert Warren	42
Koerper, Robert Allen	37
Lacoste, Jack Keltly	40
Lahna, Adolph Alexander	43
Lamm, Lewis Jacob	39 42
Lindberg, A. R.	27
Mason-Springay, Mrs. Wilfred H.	18

Matthews, James Muscoe	05 06
Maupin, William Firey	11
McCarthy, William Anthony	23
McClure, Clinton Iness	15
McManamy, Carl D.	23 26
McPike, John Martin	10
Miller, Elton Willard	08
Miltenerberger, Fred E.	33
Mitchell, Alva Edwin	33
Moeller, Otto	25
Nichols, Harry James	28
Nickel, William Frederick	10
Nielsen, Joseph N.	11
O'Brien, Gerald Davis	37
Petretic, George John	42
Phillips, George Washington	17
Pigman, George Leroy	35
Pim, James Harvey	26
Rhea, Robert Hamilton	30
Richard, Frank Thomas	17
Rixey, Samuel Wise	32
Robinson, James B.	36
Roeser, Peter Haskell	32
Rosett, Walter	25
Rumbough, William Samuel	27
Schaffer, Jacob M.	18 22
Schmidt, Reuben	17
Schutt, Wallis Isham	32
Senior, Thomas Richard	08
Smith, Lloyd Lyman	05
Smith, Roger Don	32
Snow, Harold A.	21
Spurr, Frank Arthur	29 21
Stanton, Arthur J.	25
Trappey, Adam Shelby Holmer	26
Turoff, Louis Webster	21
Walton, Melville Ralph	15
Warren, Lewis Van Buren	26
Webb, Charles E.	41
Wiegand, Henry Frank	11
Winter, Max W.	09
Young, James Lawrence	17 23

Allen Contributes

Edward W. Allen Jr., who received his B.S. in E.E. from the University of Virginia in 1925 and a L.L.B. degree from G.W. in 1933 was a recent contributor to the Proceedings of the I.R.E.

Lubin on New Job

Samuel Lubin, a former student of the G.W. School of Engineering has been appointed to the field engineering department of the Sprague Electric Co., North Adams, Mass.

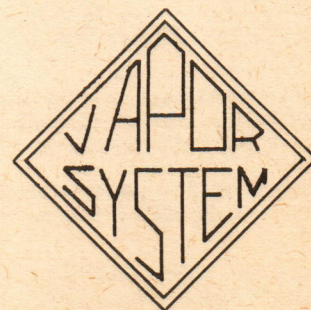
Previously he was managing director of International Radio Ltd. at Tel Aviv, Palestine. Later he joined the new developments section of the Technical Standards Division of the R.E.A. On wartime leave from this position he served as transition engineer of the Radio Research Laboratory at Harvard University.

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Van Evera Headed Rocket Research

The story of George Washington University's contract with OSRD during the War Years, as mentioned in the literary work, "Scientists Against Time," includes that one of the first rocket research laboratories in this country. This unusual contract involving over six million dollars, and covering operations reaching a peak of 700 employees, including mathematicians, engineers, chemists, and physicists, ran through a period from late 1941 till the end of the war.

In the fall of 1941, OSRD approached Dr. Marvin, seeking a contract, and requesting assistance to enable the National Defense Research Committee to carry out research beneficial to our Armed Forces. Originally, Dr. C.N. Hickman, from the Bell Telephone Laboratories and heading the NDRC, Section H, had a contract with the Navy at Indian Head, Maryland. Although research was being done then, he experiences some difficulties with the Naval procedures for hiring personnel and purchasing.

This was where George Washington University came in the picture. It accepted its first contract, which was essentially to hire personnel and buy materials, on December 1, 1941. Dr. Van Evera was appointed Official Investigator for the G.W. contract. From the beginning of 1942 until the end of August 1946, he continued to hold this position with ever-growing responsibilities.

During the period at Indian Head, a most potent and effective armor-piercing weapon was evolved into a finished state, the bazooka. Strangely enough, Dr. Hickman helped design the original rocket idea in 1918, but it never left the experimental stage. But now the Army requested NDRC to develop some sort of rocket that could be possibly launched as a rifle grenade and pierce armor and the bazooka resulted.

Then after the bazooka development, it was tested in comparison with mortars, and showed vastly superior qualities of range and accuracy. The Army was no longer hesitant. General Electric got an immediate production contract. But research was continued, and this rocket gun was gradually worked to perfection, with less flash and less blow back.

(Continued on Page 8)

MEET YOUR PROFESSOR

Manufacturing shoes and building railroads seem to have little resemblance, but Professor Otakar W. Kabelac's broad education prepared him for these and many other vocations.

Born in Prague, formerly in Bohemia, now Czechoslovakia, Professor Kabelac studied at the T. R. Polytechnicum there and was awarded a masters degree in civil engineering. Not satisfied with that education, he studied at the foreign service school in Prague, where he took political science and economics. Later, he attended the University of Berlin and also studied international law at the National Law Academy at The Hague, Netherlands.

While still in Prague, Professor Kabelac worked on various government engineering projects, including reconstruction work on the railroad between Prague and Vienna, and at the central railroad yard in Prague.

He was given the opportunity to apply his political science when his government sent him to Berlin for five years, in charge of transportation clauses in the treaty of Versailles. Special work with reference to administration of the Oder, Elbe, and Danube waterways and free zones in Hamburg and Bremen absorbed

by John Le Reche

him at this time.

As part of the reciprocal trade agreement, he spent some time in Washington as a representative from Czechoslovakia. He was a member of the delegation between 1932 and 1939.

When he returned to Europe, he left the services of his government to join a large international shoe manufacturing company. In 1939, when Hitler's armies began spreading over Europe, he brought several other Czechoslovakian technicians to expand this shoe manufacturing company to this country.

Professor Kabelac is not new at teaching. During the war, he taught at Georgetown University for 18 months, and also taught at the University of Scranton, in Pennsylvania. While there, he wrote textbooks for International Correspondence Schools.

Besides being an engineer, a diplomat, and a manufacturer, Professor Kabelac is well versed in many languages, such as Czechoslovakian, Polish, French, German, and Slavic, but he teaches his descriptive geometry and engineering mechanics classes in English.

You Asked For It!

A HOBBY LABORATORY

Operated for and by Engineers to provide adequate facilities for your creative abilities.

The Dean, Engineering Societies and the Alumni favor it; to make it yours, we want your reactions, suggestions and opinions.

Now, We Ask You

1. Your name _____
2. Your Hobby (check below):
- | | |
|-------------------|----------------|
| Electronics _____ | Plastics _____ |
| Wood _____ | Photo _____ |
| Metal _____ | Ceramics _____ |
- Other (name it) _____
3. Further suggestions _____

DON'T WAIT! PUT THEORY TO WORK, NOW!

DROP IN MECHELECIV BOX

TEAR ALONG DOTTED LINE

Rocket Research

(Continued from Page 7)

The increased research and other factors became so intense that at the end of 1943, Dr. Van Evera was faced with the prospect of finding new grounds to which the whole works could be transferred, and that the completion of the contract might be fulfilled. To locate such a spot, at least 3 miles long and 1 3/4 miles wide involved the additional necessities of power transmission, seclusion, guard, maintenance, transportation, housing, food, etc., at a time when the Armed Forces were using almost every foot of available space nearby. This was no little problem.

The site discovered and decided on was the former Ordnance Plant, used for the loading and storage of .50 caliber ammunition. Fortunately, the site was obtained by Army permission, one day before a Chemical Company was planning to take it over, on December 30th. And almost starting from scratch, Dr. Van Evera started hiring again, till arrangements were completed and he was all set to resume work with a working staff of 75 people, March 1, 1944. The name was changed to the Allegany Ballistics Laboratory.

In addition to the other developments, Indian Head was also the first experimental laboratory in the country to carry out research on properties of rocket propellants. The questions concerning this development were about the burning rate, what effected it, how it could be held constant over a temperature range, and similar ones. This powder research worked out to the stage where for a certain type or given amount of charge, that the temperature, expansion of gases, and necessary size of the venturi in the rear of the rocket, could all be readily calculated.

As a result of the Army's need for a heavy hitting weapon that could be taken into inaccessible

spots quite easily, the first Model of the Army's M-8 4 1/2" rocket was designed at Indian Head. Upon further research, a 115 mm super rocket of this type was developed almost at the end of the war, which was very accurate and had a velocity of 1000 ft per second. Fitted with long fins, and fixed under the wings, the M-8 was used very effectively by aircraft.

Many other research projects were developed at ABL, including mine clearing devices, the jet assisted take-off, powder pressurized flame throwers using jellied gasolines, several types of recoilless guns and mortars, and other rocket weapons.

The Allegany Ballistics Laboratory covered 438 acres of the North Branch of the Potomac, near Cumberland. Besides this, there was a 45,000 acre range near Petersburg, West Virginia, on the Allegany Plateau.

Leonard A. Bosin

The latest answer to Open the Door Richard: Richard was in his room with Sioux City Sue doing What Comes Naturally and he Wanted Five Minutes More.

Hypo Hollerin's

In December we announced plans to do a bit of research on the Kadak Dye Transfer process, only to be held up because we couldn't get the stuff. Now we've got it and will be able to tell you all about it as soon as we can dig into the stuff without the distractions of a research paper and mid-semester exams.

The MAY issue will not have a full color, dyetransfer not withstanding.

Kenneth Folse

Mighty Motors

The U. S. Bureau of Reclamation has ordered four of the mightiest motors ever built (65,000 horsepower each) to power the pumps to be used in storing water from the Grand Coulee Dam. The rating of these motors will exceed by more than 50% the capacity of the most powerful A-C motor ever built up to this time.

Each motor will be as big as a six-room house, will weigh 325 tons, and will move enough water to supply the requirements of a city as big as New York.

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